



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/749,680

12/28/2000

Tadashi Ohta

XA-7183E

8012

181

7590

12/13/2006

MILES & STOCKBRIDGE PC
1751 PINNACLE DRIVE
SUITE 500
MCLEAN, VA 22102-3833

EXAMINER

HERNANDEZ, NELSON D

ART UNIT

PAPER NUMBER

2622

DATE MAILED: 12/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/749,680

Applicant(s)

OHTA ET AL.

Examiner

Nelson D. Hernandez

Art Unit

2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 27,28 and 30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 27,28 and 30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 December 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. The Examiner acknowledges the amended claims file on September 14, 2006. Claim 27 has been amended. Claims 1-26 and 29 have been cancelled.

Response to Arguments

2. Applicant's arguments with respect to claim 27 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fujimori, US Patent 5,027,214 in view of Watanabe, US Patent 4,887,161 and further in view of Hisayoshi, JP 2-82773 A.**

Regarding claim 27, Fujimori discloses an electronic camera (Fig. 1) including a camera body (camera body taught in col. 7, lines 15-21) attachable to a detachable memory (See memory 18 in the memory card 17 shown in fig. 1) for storing image data comprising: an image pickup portion (Fig. 1: 4, col. 4, lines

Art Unit: 2622

14-27), which picks up an image of an object; an instruction member (Shutter release, see fig. 3; also col. 7, lines 27-51) which is operated by a user for instructing start of image taking; a compression portion (Fig. 1: 14 and 15; figs. 2, 4A and 4B; col. 5, lines 17-35) which compresses still image data at a predetermined compressibility, the still image data being picked up by said image pickup portion after the user operation of said instruction member; a recording portion (See memory 18 in the memory card 17 shown in fig. 1, col. 5, lines 31-35) which records the image data compressed by said compression portion on a memory which is attached to the camera body; a remaining capacity detection portion (Fig. 1: 24, col. 6, lines 25-43; col. 6, line 65 – col. 7, line 4) which detects a remaining capacity of said memory; a calculation portion (Fig. 1: 24, col. 6, lines 25-43; col. 6, line 65 – col. 7, line 4) which calculates previous to the user operation of said instruction member (col. 6, lines 25-43; col. 6, line 65 – col. 7, line 4) the number of still images capable of being recorded on said memory based on the remaining capacity detected by said remaining capacity detection portion and a compressed data amount compressed by said compression portion; a display portion (Fig. 1: 26) which is provided on the camera body and a control portion which causes the number of recordable still images calculated by said calculation portion to be displayed on said display portion (Col. 7, line 22 – col. 8, line 57).

Fujimori does not explicitly disclose that the display portion displays a moving image of the object picked up by said image pickup portion before applying an operation to said instruction member; and that the control portion for

Art Unit: 2622

causing the number of recordable still images calculated by said calculation portion previous to the user operation of said instruction member to be displayed overlapping with the moving image on said display portion.

However, Watanabe teaches a digital camera (Fig. 2: 10) comprising a display (Fig. 2: 24), which can be used as a viewfinder for displaying moving images and also displays the remaining number of frames (Fig. 1: D1) in the memory (Fig. 1: 20) overlapping the displayed image by teaching that the image displayed does not have to be read only from the memory device but also can be read directly from the camera through buffer memory (Fig. 7: 24A) as a modification to the invention of displaying the picture, so the image data from the subject would be read from the memory buffer to be displayed, wherein the buffer memory 24A and image memory 22 are connected to the CPU 21, so the image from the being capture in a viewfinder mode can be displayed (Col. 3, lines 20-41; col.4, lines 41-65; col. 5, lines 22-60). Although Watanabe does not explicitly teaches displaying the remaining number of frames in the memory overlapping with the moving image when using the display as a view finder, one of ordinary skill in the art would find obvious to apply the concept of displaying the remaining number of frames in the memory overlapping with the still image in the first embodiment to the second embodiment, where the display is being used as a view finder with the motivation of having the user aware of the remaining capacity of the memory in either mode.

Therefore, taking the combined teaching of Fujimori in view of Watanabe as a whole, it would have been obvious to one of ordinary skill in the art at the

Art Unit: 2622

time the invention was made to modify Fujimori by having a display capable of displaying moving images and the remaining number of frames in the memory overlapping said displayed image. The motivation to do so would have been to reduce the size of the electronic camera since there is no need of a second display for displaying the image data separated from additional data related to the camera operation and memory and also would help the user to capture images since the viewfinder shows the total area of the scene to be captured.

The combined teaching of Fujimori in view of Watanabe fails to teach that the control portion causes said display portion to display an indication that the memory is not attached, without displaying the moving image, when the memory is not attached to the camera body.

However, the concept of displaying an indication that a memory device is not attached to a camera without displaying any image is well known in the art at the time the invention was made as taught by Hisayoshi. Hisayoshi teaches an image reproduction processor (Figs. 1: 20 and 3: 20) connectable to a camera (Figs. 1: 1 and 3: 1), wherein when a memory device (video disk) is not loaded on the camera, a CPU (Fig. 1: 40 A) would send a no-disk display signal to its own display (LCD 44 as shown in fig. 2) and also a CPU (Fig. 1: 50A) would control a character generator (Fig. 1: 60) to create a no-disk message to be displayed in a monitor without displaying any other images data (See displayed message in fig. 2: DP2 displayed without any other image data) (See translation, page 11, lines 4-35).

Therefore, taking the combined teaching of Fujimori in view of Watanabe and further in view of Hisayoshi as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Fujimori and Watanabe by using the concept taught by Hisayoshi and having the display of the camera displaying an indication that the memory is not attached, without displaying the moving image, when the memory is not attached to the camera body. The motivation to do so would have been to improve the camera device by alerting the user on whether the camera is loaded with the memory so that the user can easily recognize the error and the ability of the camera to record images.

5. Claims 28 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujimori, US Patent 5,027,214 and Watanabe, US Patent 4,887,161 in view of Hisayoshi, JP 2-82773 A and further in view of Watanabe, US Patent 5,032,927.

Regarding claim 28, the combined teaching of Fujimori in view of Watanabe and further in view of Hisayoshi fails to teach a selection portion by means of which one of three compressed data amounts compressed by said compression portion is selected by a user, and wherein said calculation portion calculates the number of still images capable of being recorded on said memory based on the compressed data amount selected by said selection portion and the remaining capacity detected by said remaining capacity detection portion.

Art Unit: 2622

However, Watanabe '927 teaches a digital camera (Figs. 1, 7, 8 and 9) comprising an image pickup portion (Figs. 1: 14, 7: 14, 8: 14 and 9: 14), which picks up an image of an object; a compression portion (Figs. 1: 26, 7: 26 and 9: 26) which compresses still image data picked up by said image pickup portion at a predetermined compressibility; a selection means (Figs. 1: 88 and 7: 88) for selecting one from three compression ratio ($\frac{1}{2}$, $\frac{1}{4}$ and $\frac{1}{16}$); a recording portion (Figs. 1: 32, 7: 32, 8: 32 and 9: 32) which records the image data compressed by said compression portion on a memory which is detachably attached; a remaining capacity detection portion (Figs. 8: 92 and 9: 92) which detects a remaining capacity of said memory attached; a calculation portion (Figs. 8: 92 and 9: 92) calculates the number of still images capable of being recorded on said memory based on the compressed data amount selected by said selection portion and the remaining capacity detected by said remaining capacity detection portion; a display portion (Figs. 8: 92 and 9: 92) which is provided on an outer surface of said electronic camera and a control portion which causes the number of recordable still images calculated by said calculation portion to be displayed on said display portion (Col. 2, lines 51 - col. 3, line 31; col. 6, lines 1-58; col. 9, lines 8-37; col. 10, line 65 – col. 11, line 28; col. 12, lines 25-51).

Therefore, taking the combined teaching of Fujimori in view of Watanabe and further in view of Watanabe '927 as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the electronic camera by having a selection means for selecting one from three compression ratio and having the calculation portion calculating the number of

Art Unit: 2622

still images capable of being recorded on said memory based on the compressed data amount selected by said selection portion and the remaining capacity detected by said remaining capacity detection portion. The motivation to do so would have been to select a desired compression ratio from a selection different compression ratio so as to save the image with a desired picture quality, also would help to determine the correct amount of remaining data in the case of different image compression selected for the image data as suggested by Watanabe '927 (Col. 2, lines 35-48; col. 16, lines 3-14).

Regarding claim 30, the combined teaching of Fujimori and Watanabe in view of Hisayoshi and further in view of Watanabe '927 as applied to claim 28 teaches that the detachable memory is a memory card (See Fujimori, memory 18 in the memory card 17 shown in fig. 1, Watanabe, fig. 1: 20, 2: 20, 4: 20, and 7: 20; see also Watanabe '927, fig. 1: 32) which is able to record a plurality of compressed image data (by displaying the number of remaining images to be recorded in the remainder display 92, Watanabe '927 teaches that the memory card is able to record a plurality of compressed image data), and the amount of each compressed image data fluctuates (by teaching that three compression ratio ($\frac{1}{2}$, $\frac{1}{4}$ and $\frac{1}{16}$) can be selected for compressing the images, Watanabe '927 teaches that the amount of each compressed image data fluctuates since there are different compression ratios leading to different amount of data for different images; see col. 2, lines 51 - col. 3, line 31; col. 6, lines 1-58; col. 9, lines 8-37; col. 10, line 65 – col. 11, line 28; col. 12, lines 25-51).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Takahashi, US Patent 5,172,225 teaches the concept of displaying the amount of pictured that can be recorded in a magnetic disc by an imaging device overlapping real-time image being displayed on a display device.

Nomura, US Patent 5,097,349 teaches the concept of displaying text overlapping a moving image being displayed on a monitor.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Art Unit: 2622

Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nelson D. Hernandez whose telephone number is (571) 272-7311. The examiner can normally be reached on 8:30 A.M. to 6:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivek Srivastava can be reached on (571) 272-7304. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nelson D. Hernandez
Examiner
Art Unit 2622

NDHH
November 21, 2006



VIVEK SRIVASTAVA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600